

REMARKS

Claims 1, 3, 7, 8, 10, 12 to 18, 21 to 24, and 58 to 62 are pending in the application, of which claim 1 is the sole independent claim. Favorable reconsideration and further examination are respectfully requested.

The claims were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,084,740 (Leonhardt). As shown above, Applicants have amended the claims to define the invention with greater clarity. Accordingly, withdrawal of the rejection is respectfully requested.

Amended independent claim 1 defines a method for producing, on a magnetic tape having a magnetic recording side and a non-recording side opposite the recording side, a plurality of servo tracks capable of being optically detected independently from one another. The method includes passing at least a portion of the magnetic tape through a work area and forming the servo tracks and non-servo tracks on a surface of the non-recording side of the portion of the magnetic tape as the tape passes through the work area. The servo tracks are grouped in bands, each comprised of plural servo tracks. Each of the bands is delimited by at least one non-servo track at upper and lower portions thereof. Arranging the servo tracks in this manner, with non-servo track delimiters, facilitates servo tracking during reading and writing.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1, particularly with respect to forming bands, comprised of plural servo tracks, that are delimited by at least one non-servo track at upper and lower portions of the bands.

Leonhardt describes forming magnetic data on a front side of a tape and servo tracks on a back side of the tape. In addition to the servo tracks, Leonhardt describes including auxiliary

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information on the back side of the tape. This auxiliary information may include non-servo data, such as that described from column 6, lines 58 through column 7, line 14 of Leonhardt.

Thus, while Leonhardt does describe forming non-servo data on the same side of a tape as the servo data, Leonhardt does not describe the specific servo/non-servo arrangement of claim 1. That is, nowhere does Leonhardt disclose or suggest that its servo tracks are formed in bands and that non-servo tracks delimit the bands of servo tracks. Instead, Leonhardt describes modulating the servo and non-servo information differently, then separating the two using a digital signal processor (see, e.g., column 7, lines 9 to 13 of Leonhardt). Accordingly, the non-servo information provided on the back side of the Leonhardt tape would not provide the same advantages as the arrangement claimed in claim 1.

For at least the foregoing reasons, claim 1 is believed to be patentable over Leonhardt.

The remaining art of record has been reviewed and is not understood to remedy the foregoing deficiencies of Leonhardt. Accordingly, the application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicant's undersigned attorney can be reached at the address shown below. All correspondence should continue to be directed to Peter J. Devlin at the address shown below.

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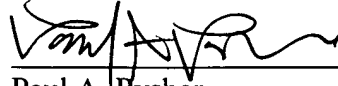
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Telephone calls regarding this application should be directed to the undersigned

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

--1. (Amended) A method for producing, on a magnetic tape having a magnetic recording side and a non-recording side opposite the recording side, a plurality of servo tracks capable of being optically detected independently from one another, the method comprising passing at least a portion of the magnetic tape through a work area; and forming the servo tracks and non-servo tracks [printing] on a surface of the non-recording side of the portion of the magnetic tape as the tape passes through the work area, the servo tracks being grouped in bands, each comprised of plural servo tracks, each of the bands being delimited by at least one non-servo track at upper and lower portions thereof [the plurality of optically detectable servo tracks].

3. (Amended) The method according to claim 1, wherein each of the [plurality of] servo tracks comprises a plurality of discrete optically independently detectable longitudinally spaced marks.

7. (Amended) The method according to claim 1, wherein forming comprises printing the servo tracks and wherein printing is performed [produced] by [an] inkjet printing.

8. (Amended) The method according to claim 7, wherein the inkjet printing uses [includes] a fluorescent material that is optically detectable under selected lighting conditions.

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10 (Amended) The method according to claim 60, wherein a second flat surface substantially perpendicular to the first surface guides a [the] portion of tape passing through the work area to stabilize the tape by reducing transverse motion of the tape.

12. (Amended) The method according to claim 1, further comprising [including the act of] cleaning the magnetic tape after forming the servo tracks [subsequent to printing a servo track] on the magnetic tape.

13. (Amended) The [A] method according to claim 12, wherein cleaning the magnetic tape includes [the act of] flowing a gas across a [the] surface of the tape to remove debris from the tape.

14 (Amended) The [A] method according to claim 12, wherein cleaning the magnetic tape includes [the act of] contacting the magnetic tape with a cleaning material to remove [for removing] debris from the magnetic tape [therefrom].

15. (Amended) The method according to claim 1, further comprising optically verifying a characteristic of the [optically detectable] servo tracks to control [for controlling] a marking quality of the servo tracks.

16. (Amended) The [A] method according to claim 15, wherein verifying a characteristic includes measuring a characteristic representative of size of a [the] servo track.

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17. (Amended) The method [A characteristic] according to claim 15, wherein verifying a characteristic includes measuring a characteristic representative of location of a [the] servo track.

18. (Amended) The method according to claim 1, wherein forming comprises [printing to the portion of magnetic tape includes] applying an embossing roller to the magnetic tape to form a servo pattern thereon.

21. (Amended) The method according to claim 1, wherein forming comprises [printing to the portion of magnetic tape includes] metallizing the tape to form a servo pattern thereon.

22. (Amended) The method according to claim 1, wherein forming comprises [that includes] employing a photographic process to develop an image representative of a servo track pattern.

23. (Amended) The method according to claim 1, wherein forming comprises [printing to the tape includes] applying a fluorescent material to the magnetic tape.

24. (Amended) The [A] method according to claim 1, further comprising [including the further act of] burnishing the magnetic tape.

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58. (Amended) The method according to claim 1, wherein the servo tracks are formed using a plurality of optical beams, and the plurality of optical beams are [is] formed by optically beam-splitting a single laser beam emitted by a laser.

59. (Amended) The method according to claim 58, wherein forming the servo tracks comprises [are formed by]:

passing the single laser beam through a first beamsplitter to form a first band pattern defining [the] spaced apart multiple bands; and

passing the spaced apart multiple bands through a second beam splitter to form a second band pattern defining [the plurality of] servo tracks within a respective one of the spaced apart multiple bands.

60. (Amended) The method according to claim 1, wherein a force generated by a linear tape motion urges the recording side of the magnetic tape against a first surface disposed in the work area so as to maintain a [printing] focus of the non-recording side of the tape with respect to forming a servo [printing] pattern.

61. (Amended) The method according to claim 1, wherein the servo tracks are formed using an optical beam patter, and the optical beam pattern has a width that is substantially identical to a width of the magnetic tape.

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62. (Amended) The method according to claim 3, wherein forming comprises forming servo marks on different servo tracks, and wherein the servo marks that are located on the different servo tracks are formed [marked] simultaneously.--

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